SIEMENS

PATENT Attorney Docket No. 2003P17536WOUS

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Inventor:	Michael Maschke)	Group Art Unit:	3777
Serial No.:	10/587,671	Examiner:	J. F. Brutus
Filed:	July 27, 2006	Confirmation No.:	8478
Title	DEVICE AND METHOD FOR T	AKING A HIGH ENER	RGY IMAGE

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APPELLANTS' REPLY BRIEF

Sir:

Pursuant to 37 C.F.R. §41.41, this Reply Brief is responsive to the Examiner's Answer ("Answer") mailed 18 January 2012. This is not a substitute for the Appeal Brief. Any ground for rejection in the Answer that is not refuted herein is considered by Appellants to have been sufficiently argued in the Appeal Brief, such that no further comment is needed herein.

Arguments herein focus on errors and new arguments presented in the Answer.

This Reply is primarily directed to select remarks made under the heading "Response to Argument" beginning at page 9 of the Answer. All rejections continue, and this paper provides further argument in support of overturning all rejections by specifically addressing the Examiner's most current argument for rejecting claims 11 and 20 under 35 U.S.C. 103(a) over

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Banik (US2005/0197536) in view of Malackowski (US2004/0267297) and further in view of Pronk (U.S. 6,907,104) and still further in view of Whipple (US2003/0230630).

Concerning claim 11, the Answer (at page 9) appears to affirm that the rejection is merely a piecemeal reconstruction in the absence of any motivation to pick and choose subject matter from multiple references. That is, the Examiner acknowledges that the Banik reference does not disclose an x-ray imaging unit and refers to the Pronk reference as being relied upon for teaching a computer to control an x-ray imaging unit. The argument "finds" prior art which makes mention of a contrast adjustment (outside of the field of high energy (e.g., X-ray) medical imaging) and attempts to adapt the art to recreate the invention. However, the basic elements and teachings which would motivate the claimed combination are not present in the prior art. The argument cites col. 1, lines 18-30 of Pronk for disclosure of a

"computer that sets and controls an X-ray imaging device based on specific information of a patient such as body part to be examined by reading a chip card within which the information is stored ..."

In fact, the cited passage refers to "user-specific preferred settings" and setting of parameters such as radiation intensity which are preprogrammed as a function of the <u>organ</u> (not an adjuvant) to be examined. This is essentially the same argument put forward in the Advisory Action mailed 8/23/11, but the Answer recognizes that more is required in order to meet the terms of claim 11. Specifically, argument at page 7 of the Appeal Brief placed the Examiner on notice that this prior art (Pronk)

does not at all render the claimed invention obvious because none of the prior art addresses a contrast adjustment in an image <u>based on properties of an adjuvant</u> present in an image of, for example, a portion of a patient's body. Appellant teaches such use of specific information relating to the adjuvant which can enhance the contrast between the adjuvant and other portions of the image.

That is, claim 11 expressly requires that "the control unit [be] supplied with an identification code of the adjuvant via an input device and coupled to set operating parameters of the image unit according to the identification code to control contrast between the adjuvant and an adjacent region of the object in the high energy image." The Pronk reference does not relate to any adjuvant.

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Apparently in response to Appellant's argument, the Examiner now contends that the Banik reference discloses an "adjuvant" in order to "find" the elements of claim 11 in the prior art. At page 11 of the Answer, reference was made to Paragraph [0227] of Banik, which passage merely provides examples of surgical procedures, including implantation of bulking agents. None of this appears to relate to the inventive concept of supplying an identification code of the adjuvant "to set operating parameters of the image unit ... to control contrast ..." as required by claim 11. The Answer uses language such as "the implants [of Banik] would have been scanned with an identification code and the imaging subsystem would adjust the intensity of the imager ...[Emphasis Added]" All of this confirms that the Examiner is explaining how, in the Examiner's opinion, one might reconstruct the invention of claim 11 – but without regard to showing – each step of the way – a motivation for reassembling the prior art. This is not consistent with the law on obviousness.

Only the Appellant recognizes that the operating parameters for an image to be taken with an adjuvant can be associated with an identification code of the specific adjuvant. None of the other art citations compensate for the deficiencies in the Banik and Pronk references or for the lack of motivation to recombine the prior art. In fact, the Answer has ignored this deficiency as though there might be no distinction between the claimed invention and the pieces of prior art which form the hindsight combination.

Further, the Answer does not respond to deficiencies in the disclosure of the Malackowski reference which do <u>not</u> at all relate to setting

operating parameters of the image unit according to the identification code [of the adjuvant] to control contrast between the adjuvant and an adjacent region of the object ...

The Examiner's rebuttal to argument concerning the erroneous application of Whipple to claim 11 has also mischaracterized Appellant's argument. Appellant did not state that there is no disclosure of bar code images in the abstract of Whipple. Rather, it is argued by the Appellant:

"It is not seen that any disclosure relating to the bar code images described in the abstract of Whipple relate[s] to controlling image contrast ... "

The Answer now cites par [0062] of Whipple which gives recognition to the importance of properly adjusted contrast to improve <u>readability of a bar code</u>. Even so, any such disclosure in Whipple only relates to image contrast for a bar code, and this has *nothing to do* with

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controlling contrast <u>between an adjuvant and surrounding regions</u> in an x-ray image. Thus the statement at page 12 of the Answer, concerning "properly adjusted contrast ... to produce maximum readability of the bars ..." has little to do with overcoming the deficiencies of the Examiner's prior art combination. There simply is no support in the prior art for a

"control unit supplied with an identification code of the adjuvant via an input device and coupled to set operating parameters of the image unit according to the identification code"

As concluded in the Appeal Brief, the rejection of claim 11 is flawed. There is no prior art which provides an identification code for an adjuvant to control contrast. Further, there is no motivation to combine any of the prior art in a manner which results in the claimed invention. Instead, the rejection is an attempt to reconstruct the invention in hindsight by suggesting that certain ones of the claimed features *could* be reassembled by picking and choosing pieces from the prior art.

In summary, Appellant has identified several deficiencies in the rejection of claim 11.

The Answer has not responded to the deficiencies. There is no prior art which renders the following feature obvious:

a control unit supplied with an identification code of the <u>adjuvant</u> to set operating parameters of the image unit according to the identification code to control contrast between the adjuvant and an adjacent region of the object.

As already fully argued in the Appeal Brief, the method of claim 20 recites features concerning use of an identification code of an adjuvant to set operating parameters and control contrast between an adjuvant and a region of an object (e.g., a body region). Arguments beginning at page 12 of the Answer contain similar deficiencies as those noted for claim 11. For example, at page 12, and as best understood from the grammar used in the argument, citation is made to Paragraph [0084] of Banik to argue that adjustment of parameters of an imager based on contrast "can happen due to the action of inserting the tools." Again the argument is steeped in possibilities of how one might recreate the invention from pieces of prior art. In fact, the referenced tools [see Paragraph [0094] of Banik, are not disclosed in the context of image quality but, rather, in relation to identification and tracking (in the sense of an inventory method) and in relation to operating parameters concerning the use of instruments in a medical procedure. There

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is no apparent relationship between the citation of tools and the citation of passages concerning adjustment of contrast at Paragraphs [0073], [0074] and [0084] of the Banik reference.

Other arguments in the Answer, concerning the independent claims and the dependent claims, are traversed but are not separately addressed herein because Appellants stand on the arguments made in the Appeal Brief. In conclusion it is urged that the substantive deficiencies in the Answer appear to confirm that the rejections are only a hindsight attempt to reconstruct the prior art to reject the independent claims.

Respectfully submitted,

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Dated: 9- Man - 12